

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_D\DATA\VD080219\  
 Data File : VD063326.D  
 Acq On : 2 Aug 2019 19:35  
 Operator : VA/AP  
 Sample : K4130-08  
 Misc : 5.82g/5ml/MSVOA\_D/SOIL  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 1S-F2-(30)

Quant Time: Aug 04 03:40:18 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D072919S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 30 03:04:50 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.02  | 168  | 125161   | 50.00 | ug/l  | -0.02    |
| 34) 1,4-Difluorobenzene    | 8.20  | 114  | 182729   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 12.35 | 117  | 173561   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 14.51 | 152  | 100286   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.43  | 65   | 99785    | 71.85 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 143.70% |          |
| 35) Dibromofluoromethane    | 6.90  | 113  | 81775    | 52.42 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.84% |          |
| 50) Toluene-d8              | 10.39 | 98   | 143472   | 41.09 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 82.18%  |          |
| 62) 4-Bromofluorobenzene    | 13.54 | 95   | 73706    | 46.32 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 92.64%  |          |

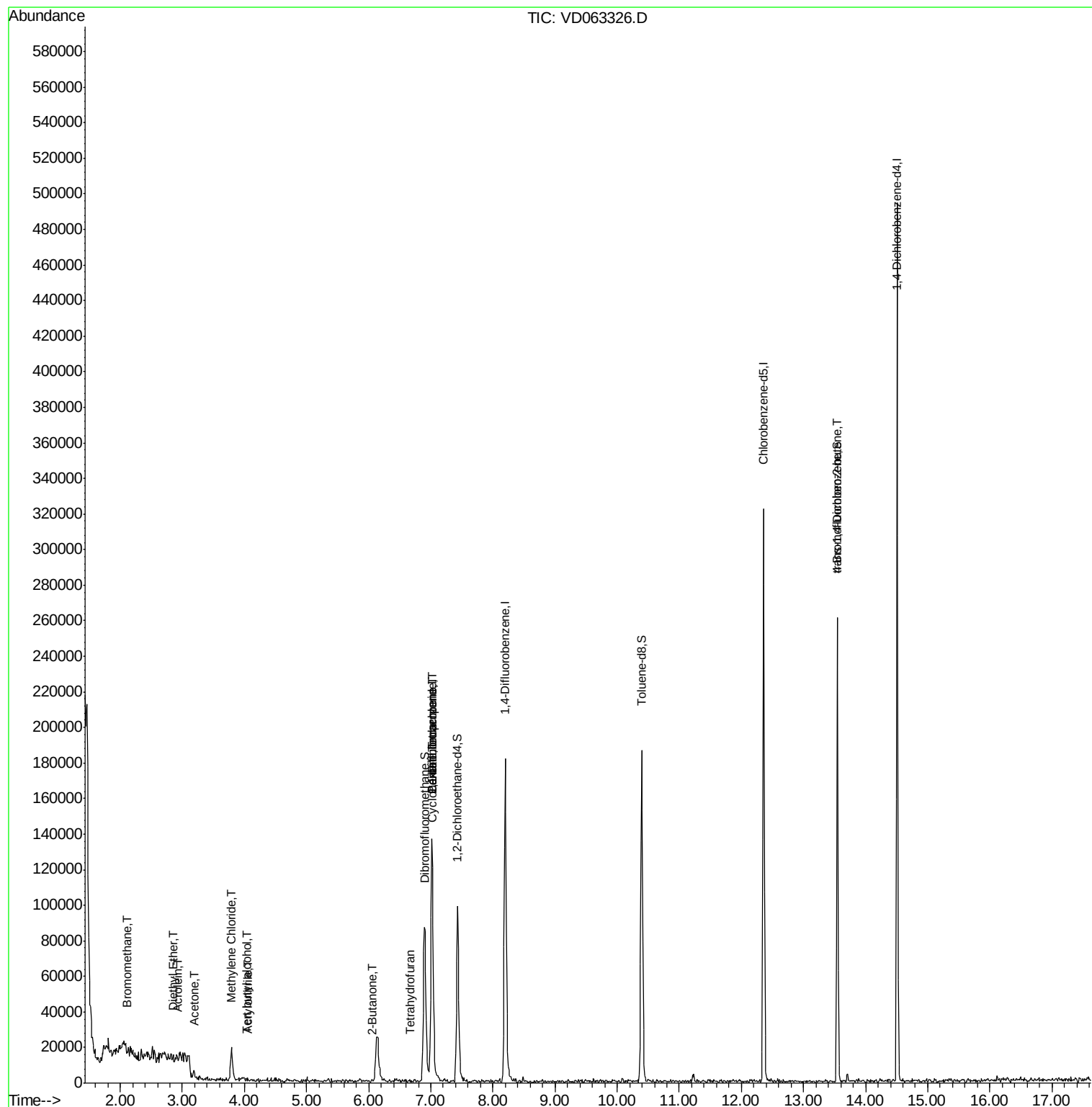
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 5) Bromomethane                | 2.11  | 94   | 699      | 1.126   | ug/l # | 12     |
| 8) Diethyl Ether               | 2.84  | 74   | 851      | 2.547   | ug/l # | 1      |
| 11) Tert butyl alcohol         | 4.03  | 59   | 629      | 10.321  | ug/l # | 69     |
| 13) Acrolein                   | 2.93  | 56   | 254      | 4.330   | ug/l   | 90     |
| 15) Acrylonitrile              | 4.06  | 53   | 184      | 1.164   | ug/l # | 14     |
| 16) Acetone                    | 3.20  | 43   | 2925     | 10.810  | ug/l # | 66     |
| 20) Methylene Chloride         | 3.79  | 84   | 9373     | 8.570   | ug/l   | 93     |
| 25) 2-Butanone                 | 6.06  | 43   | 286      | 1.053   | ug/l # | 56     |
| 29) Tetrahydrofuran            | 6.66  | 42   | 197      | 1.532   | ug/l # | 33     |
| 31) Cyclohexane                | 7.04  | 56   | 3154     | 2.550   | ug/l # | 47     |
| 36) 1,1-Dichloropropene        | 7.02  | 75   | 8725     | 5.232   | ug/l # | 53     |
| 38) Carbon Tetrachloride       | 7.03  | 117  | 12503    | 4.980   | ug/l # | 11     |
| 81) trans-1,4-Dichloro-2-buten | 13.54 | 75   | 34697    | 103.733 | ug/l # | 3      |

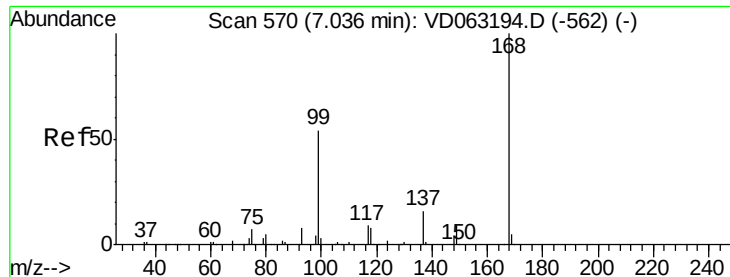
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_D\DATA\VD080219\  
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1S-F2-(30)

Quant Time: Aug 04 03:40:18 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D072919S.M  
Quant Title : SW846 8260  
QLast Update : Tue Jul 30 03:04:50 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.02 min Scan# 568

Delta R.T. -0.02 min

Lab File: VD063326.D

Acq: 2 Aug 2019 19:35

Instrument :

MSVOA\_D

ClientSampleId :

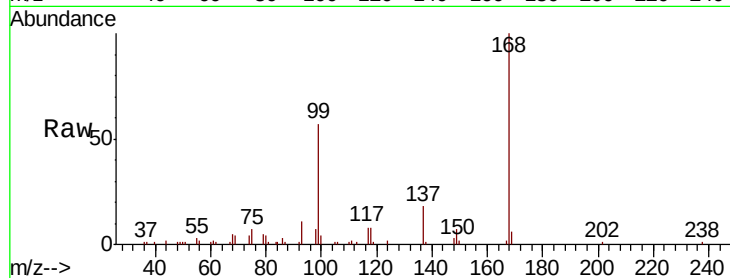
1S-F2-(30)

Tgt Ion:168 Resp: 125161

Ion Ratio Lower Upper

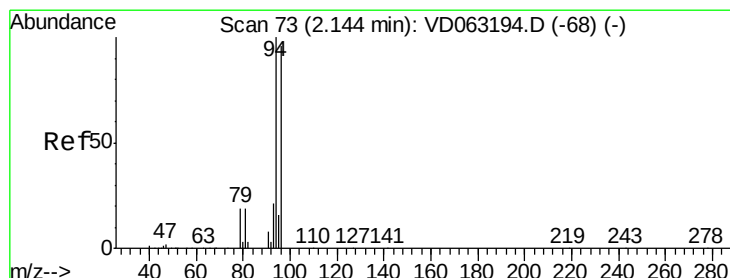
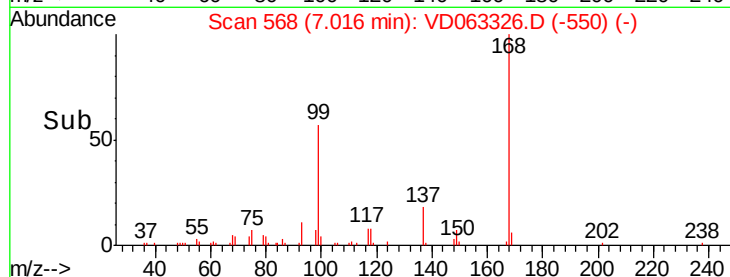
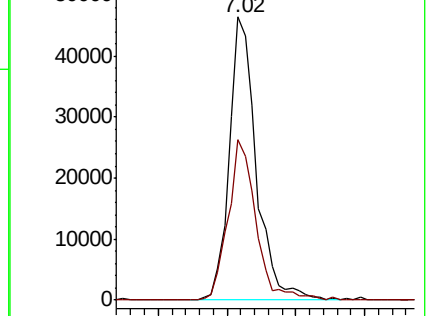
168 100

99 56.6 43.7 65.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC



#5

Bromomethane

Concen: 1.126 ug/l

RT: 2.11 min Scan# 70

Delta R.T. -0.03 min

Lab File: VD063326.D

Acq: 2 Aug 2019 19:35

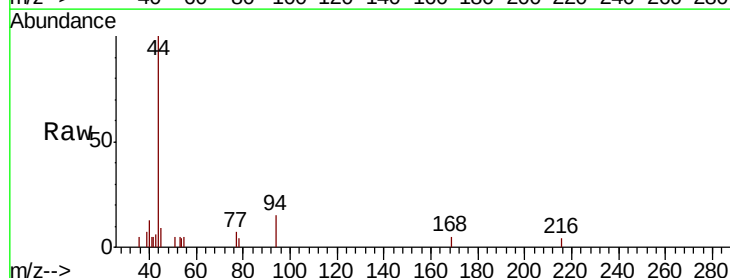
Tgt Ion: 94 Resp: 699

Ion Ratio Lower Upper

94 100

96 0.0 76.4 114.6#

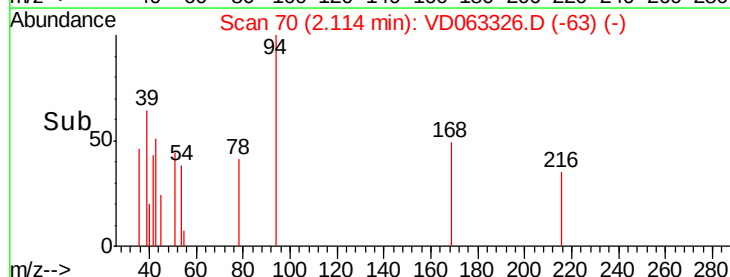
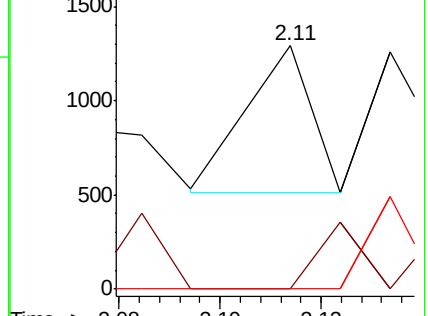
93 0.0 17.3 25.9#

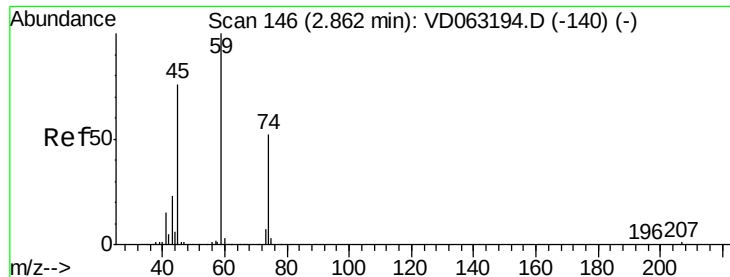


Abundance Ion 94.00 (93.70 to 94.70): VDC

Ion 96.00 (95.70 to 96.70): VDC

Ion 93.00 (92.70 to 93.70): VDC





#8

Diethyl Ether

Concen: 2.547 ug/l

RT: 2.84 min Scan# 144

Delta R.T. -0.02 min

Lab File: VD063326.D

Acq: 2 Aug 2019 19:35

Instrument :

MSVOA\_D

ClientSampleId :

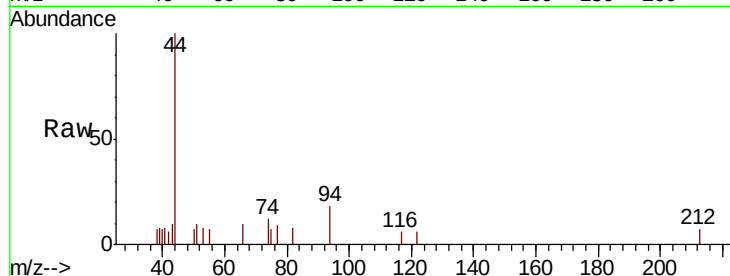
1S-F2-(30)

Tgt Ion: 74 Resp: 851

Ion Ratio Lower Upper

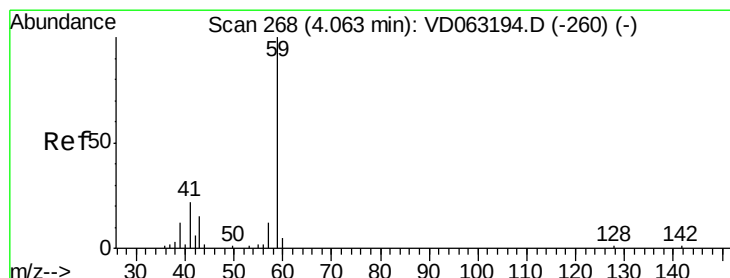
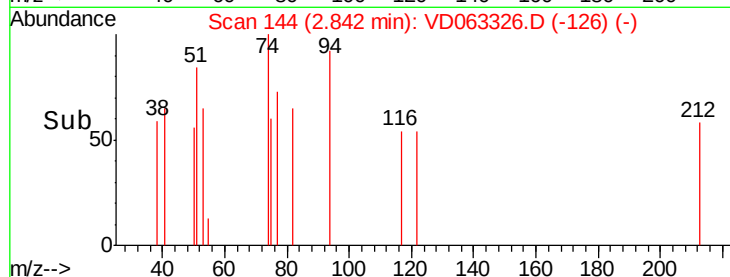
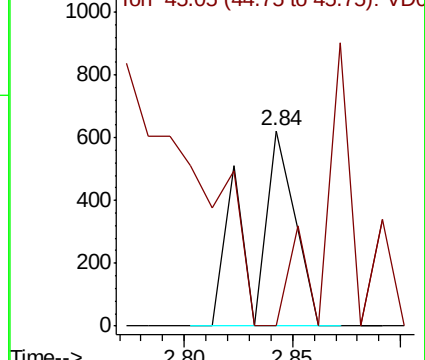
74 100

45 0.0 73.6 220.8#



Abundance Ion 74.00 (73.70 to 74.70): VDC

Ion 45.05 (44.75 to 45.75): VDC



#11

Tert butyl alcohol

Concen: 10.321 ug/l

RT: 4.03 min Scan# 265

Delta R.T. -0.03 min

Lab File: VD063326.D

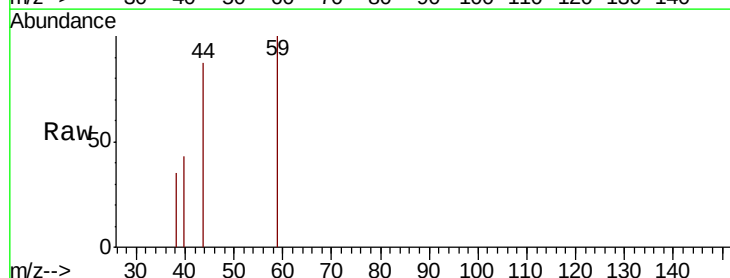
Acq: 2 Aug 2019 19:35

Tgt Ion: 59 Resp: 629

Ion Ratio Lower Upper

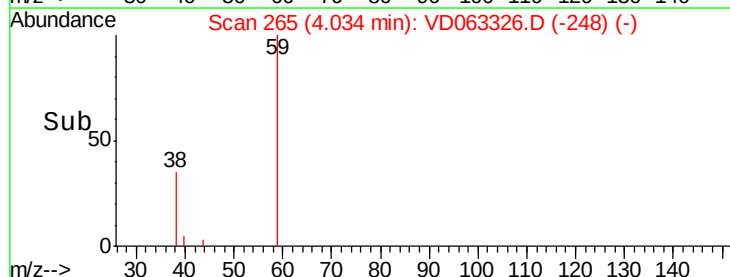
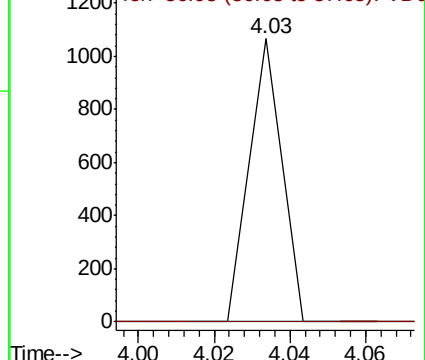
59 100

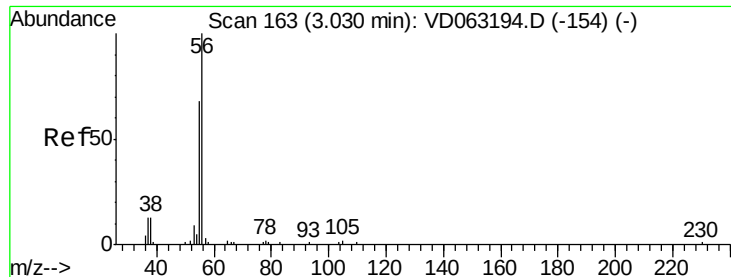
57 0.0 9.6 14.4#



Abundance Ion 58.95 (58.65 to 59.65): VDC

Ion 56.95 (56.65 to 57.65): VDC





#13

Acrolein

Concen: 4.330 ug/l

RT: 2.93 min Scan# 153

Delta R.T. -0.10 min

Lab File: VD063326.D

Acq: 2 Aug 2019 19:35

Instrument :

MSVOA\_D

ClientSampleId :

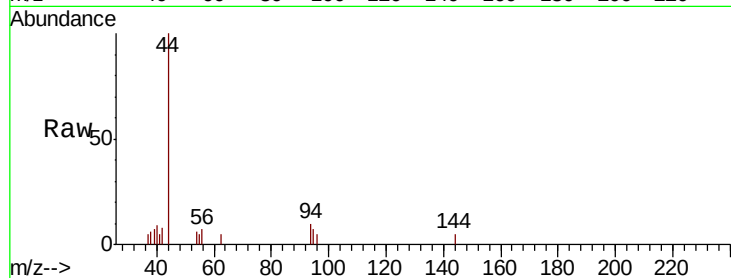
1S-F2-(30)

Tgt Ion: 56 Resp: 254

Ion Ratio Lower Upper

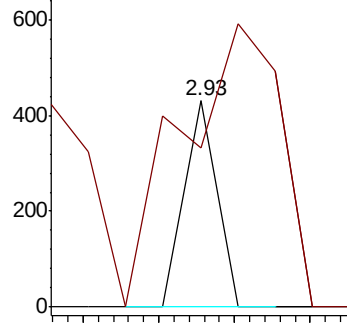
56 100

55 77.2 55.3 82.9

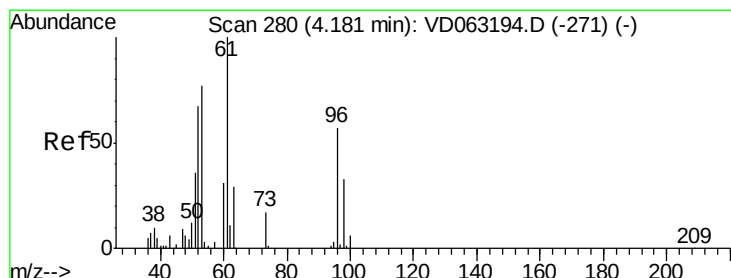
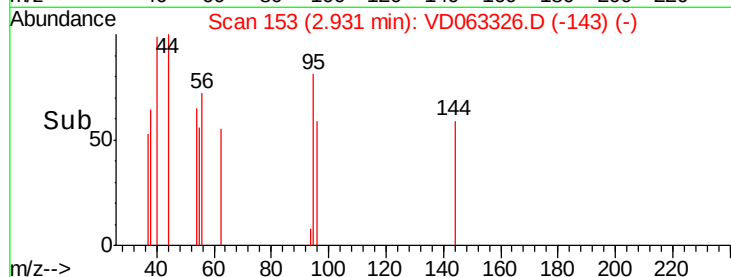


Abundance Ion 55.95 (55.65 to 56.65): VDC

Ion 55.00 (54.70 to 55.70): VDC



Time-->



#15

Acrylonitrile

Concen: 1.164 ug/l

RT: 4.06 min Scan# 268

Delta R.T. -0.12 min

Lab File: VD063326.D

Acq: 2 Aug 2019 19:35

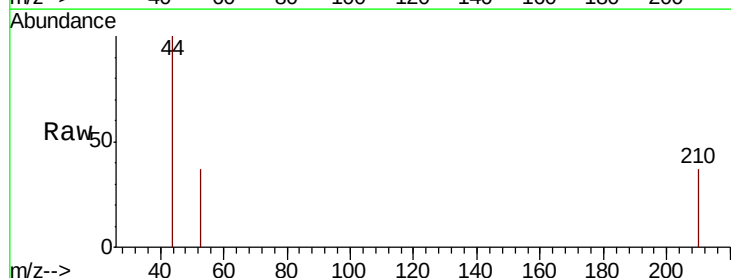
Tgt Ion: 53 Resp: 184

Ion Ratio Lower Upper

53 100

52 0.0 69.7 104.5#

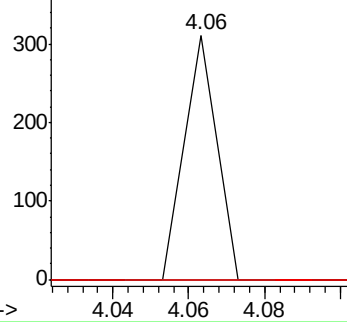
51 0.0 37.4 56.0#



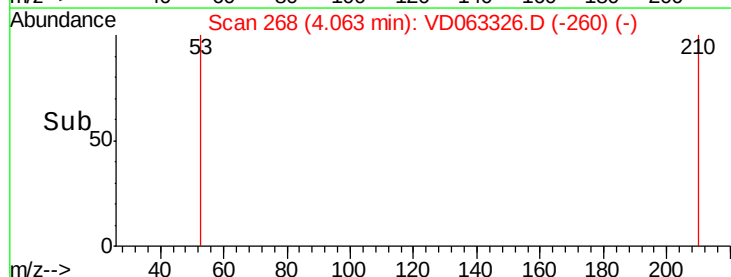
Abundance Ion 53.00 (52.70 to 53.70): VDC

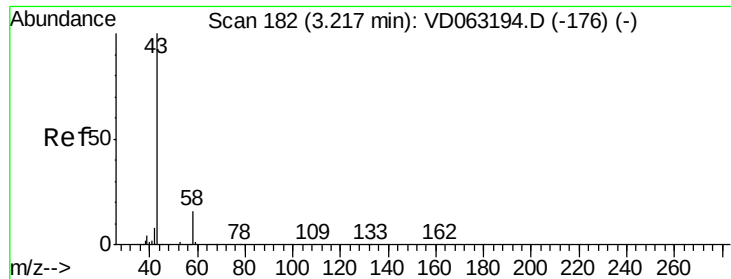
Ion 52.00 (51.70 to 52.70): VDC

Ion 51.00 (50.70 to 51.70): VDC



Time-->

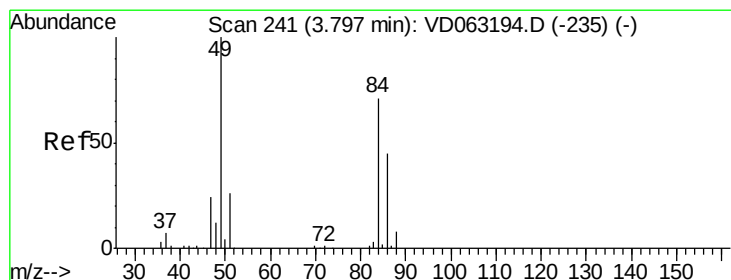
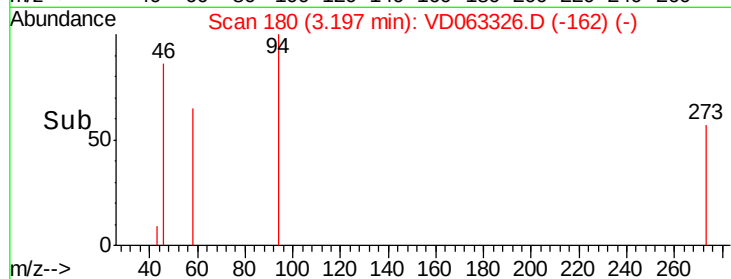
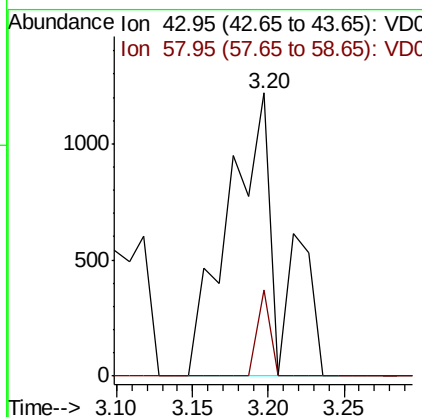
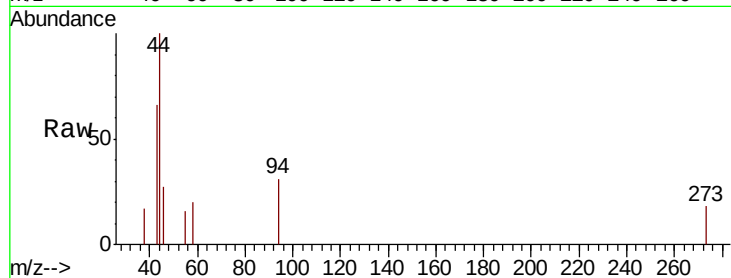




#16  
Acetone  
Concen: 10.810 ug/l  
RT: 3.20 min Scan# 180  
Delta R.T. -0.02 min  
Lab File: VD063326.D  
Acq: 2 Aug 2019 19:35

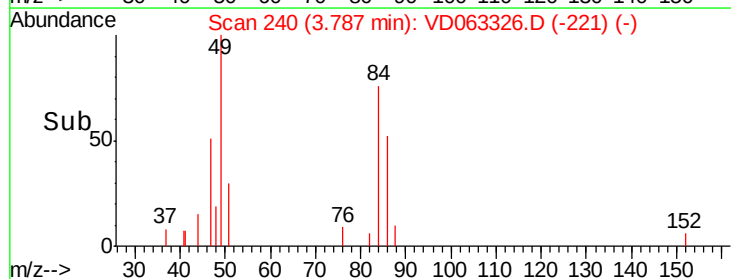
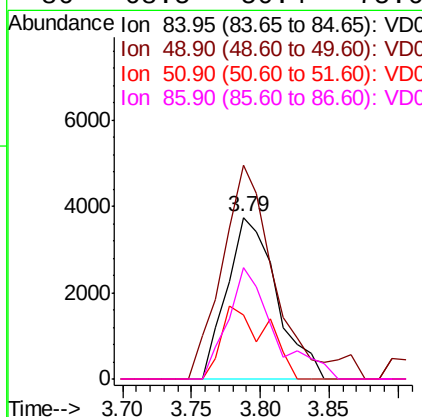
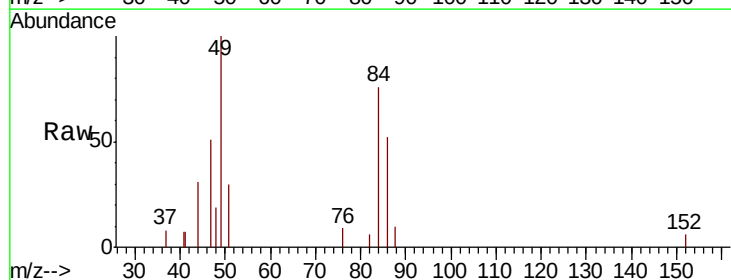
Instrument :  
MSVOA\_D  
ClientSampleId :  
1S-F2-(30)

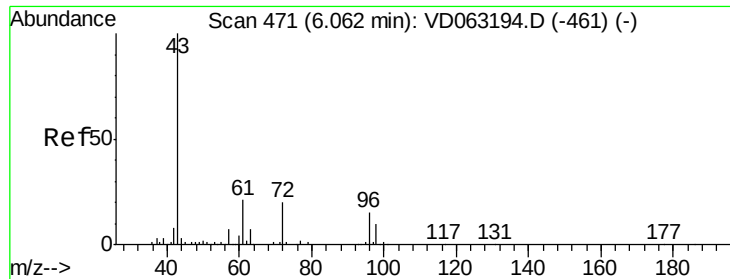
Tgt Ion: 43 Resp: 2925  
Ion Ratio Lower Upper  
43 100  
58 30.5 13.0 19.4#



#20  
Methylene Chloride  
Concen: 8.570 ug/l  
RT: 3.79 min Scan# 240  
Delta R.T. -0.01 min  
Lab File: VD063326.D  
Acq: 2 Aug 2019 19:35

Tgt Ion: 84 Resp: 9373  
Ion Ratio Lower Upper  
84 100  
49 132.0 112.5 168.7  
51 39.6 29.6 44.4  
86 68.5 50.4 75.6





#25

2-Butanone

Concen: 1.053 ug/l

RT: 6.06 min Scan# 471

Delta R.T. -0.00 min

Lab File: VD063326.D

Acq: 2 Aug 2019 19:35

Instrument :

MSVOA\_D

ClientSampleId :

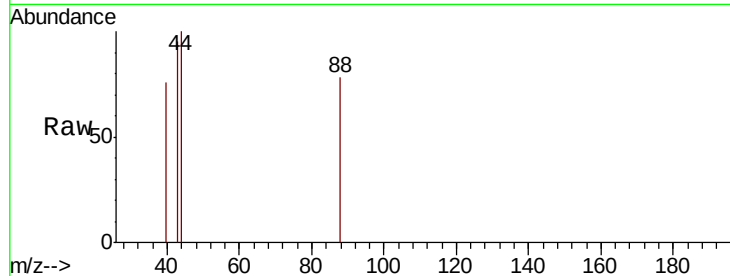
1S-F2-(30)

Tgt Ion: 43 Resp: 286

Ion Ratio Lower Upper

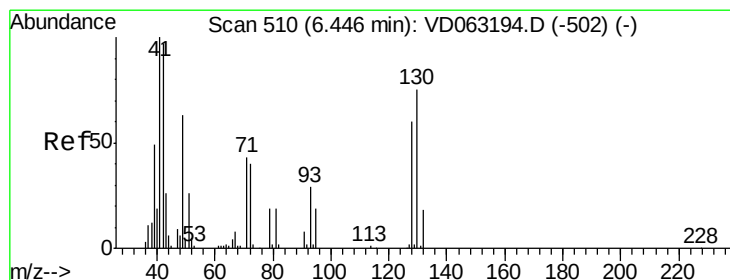
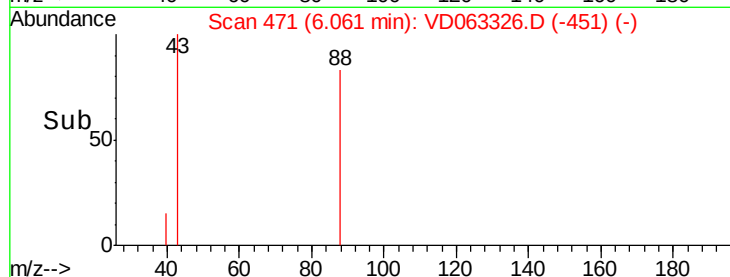
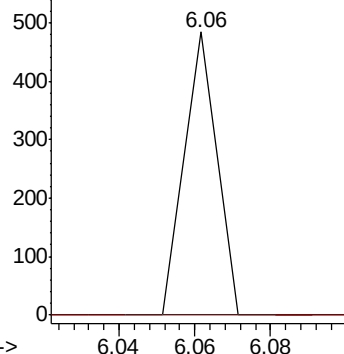
43 100

72 0.0 16.3 24.5#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 72.00 (71.70 to 72.70): VDC



#29

Tetrahydrofuran

Concen: 1.532 ug/l

RT: 6.66 min Scan# 532

Delta R.T. 0.22 min

Lab File: VD063326.D

Acq: 2 Aug 2019 19:35

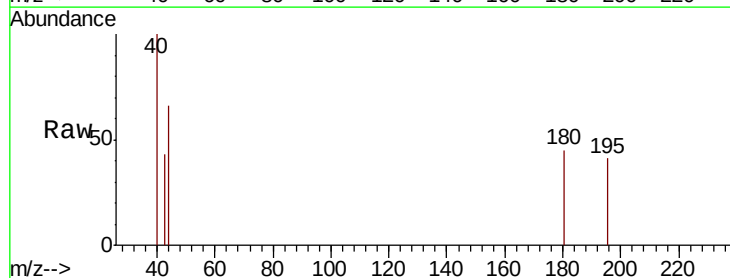
Tgt Ion: 42 Resp: 197

Ion Ratio Lower Upper

42 100

72 0.0 33.4 50.2#

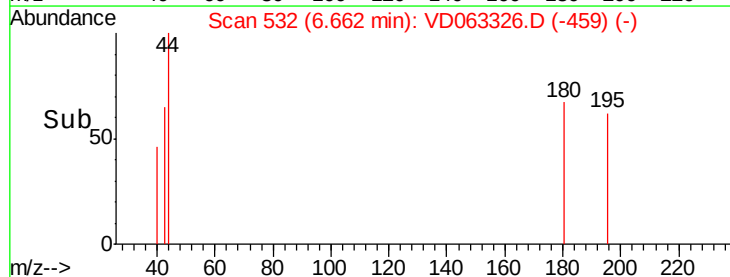
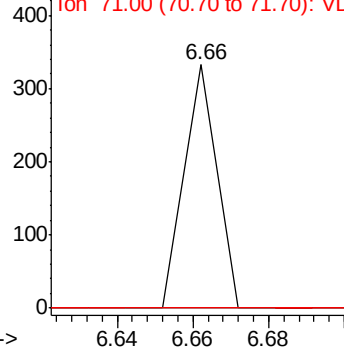
71 0.0 35.7 53.5#

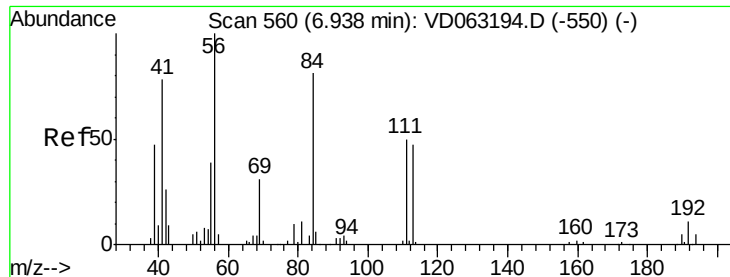


Abundance Ion 42.00 (41.70 to 42.70): VDC

Ion 72.00 (71.70 to 72.70): VDC

Ion 71.00 (70.70 to 71.70): VDC

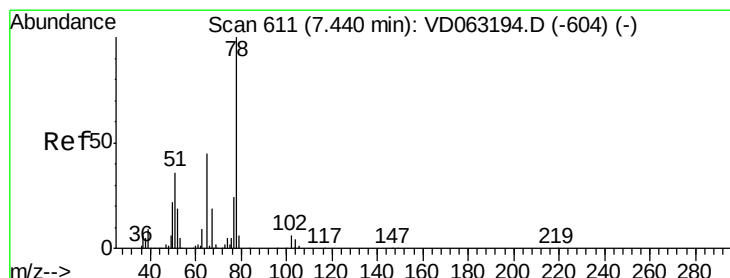
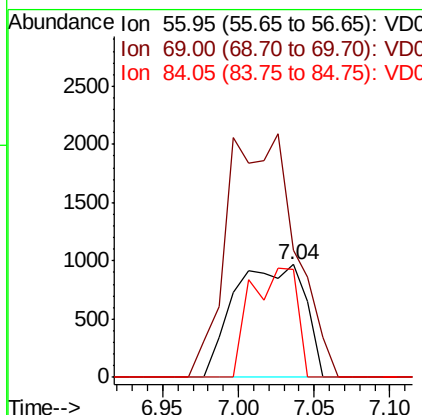
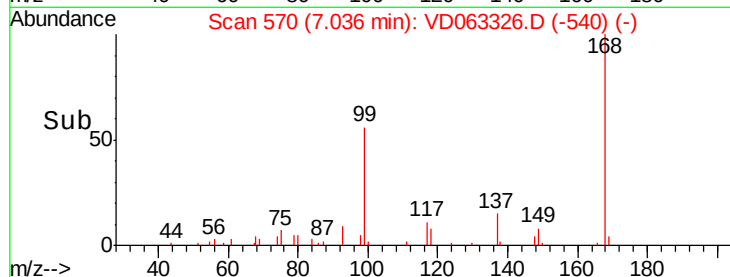
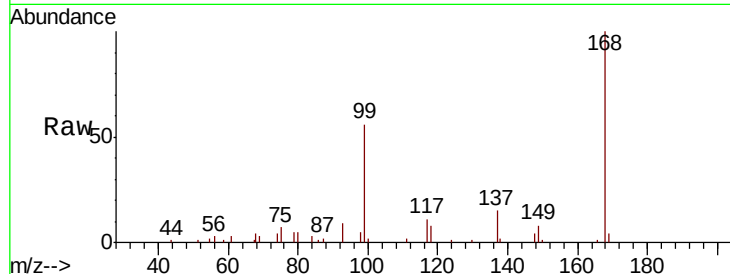




#31  
Cyclohexane  
Concen: 2.550 ug/l  
RT: 7.04 min Scan# 570  
Delta R.T. 0.10 min  
Lab File: VD063326.D  
Acq: 2 Aug 2019 19:35

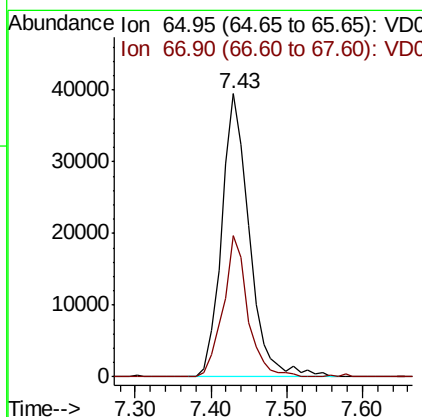
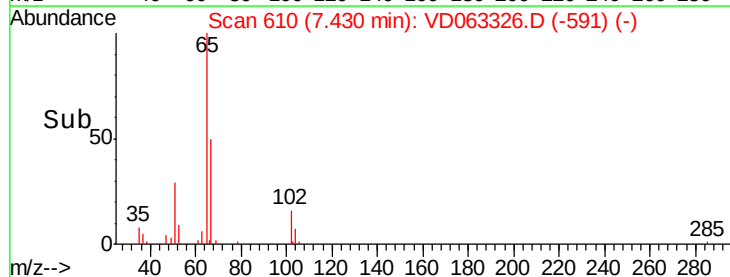
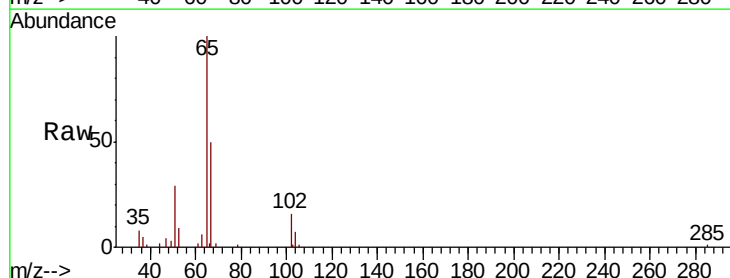
Instrument :  
MSVOA\_D  
ClientSampleId :  
1S-F2-(30)

Tgt Ion: 56 Resp: 3154  
Ion Ratio Lower Upper  
56 100  
69 113.0 24.5 36.7#  
84 95.6 64.9 97.3

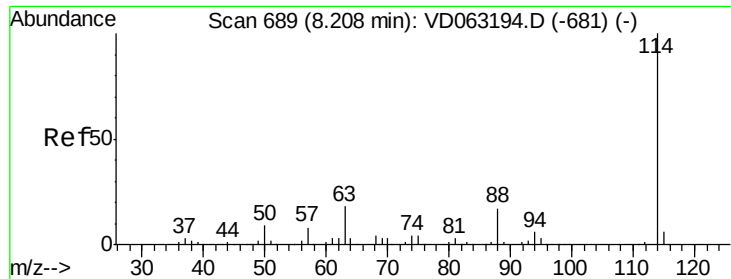


#33  
1,2-Dichloroethane-d4  
Concen: 71.851 ug/l  
RT: 7.43 min Scan# 610  
Delta R.T. -0.01 min  
Lab File: VD063326.D  
Acq: 2 Aug 2019 19:35

Tgt Ion: 65 Resp: 99785  
Ion Ratio Lower Upper  
65 100  
67 50.1 0.0 85.8



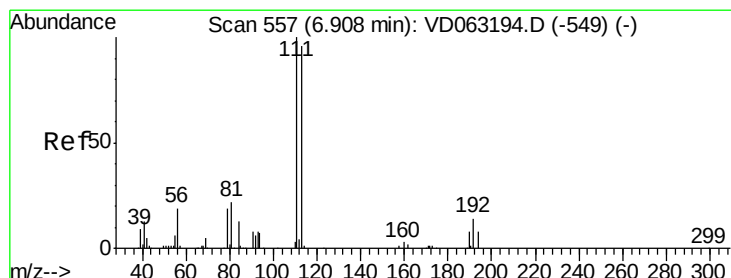
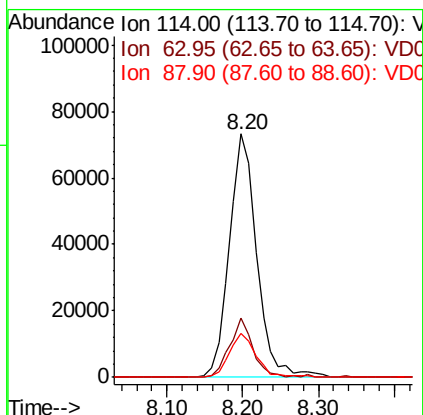
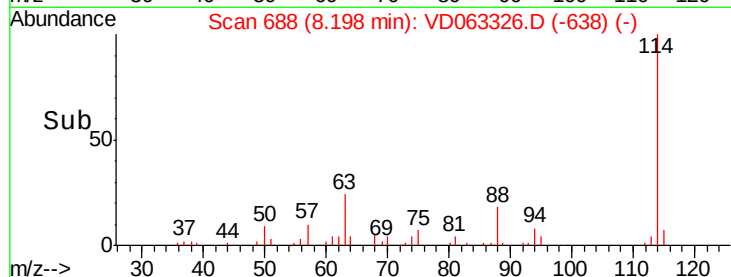
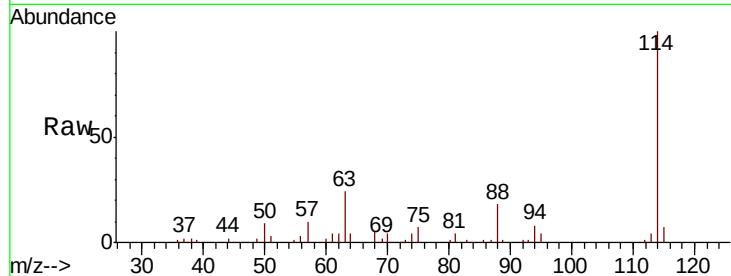




#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.20 min Scan# 688  
 Delta R.T. -0.01 min  
 Lab File: VD063326.D  
 Acq: 2 Aug 2019 19:35

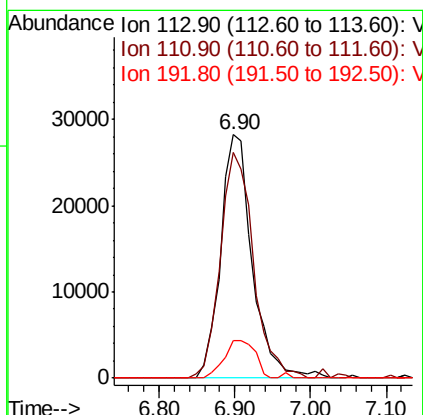
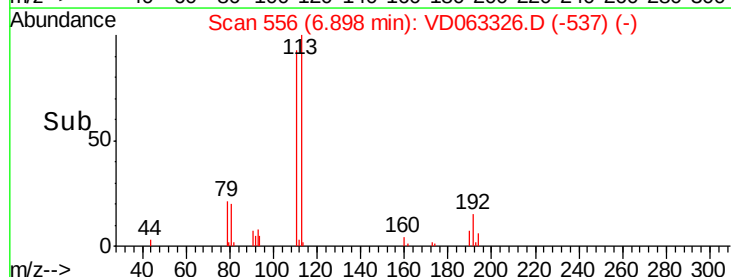
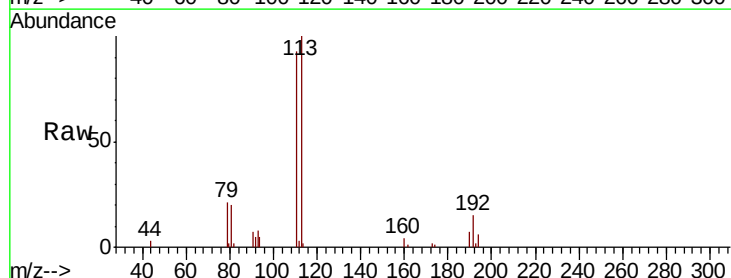
Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 1S-F2-(30)

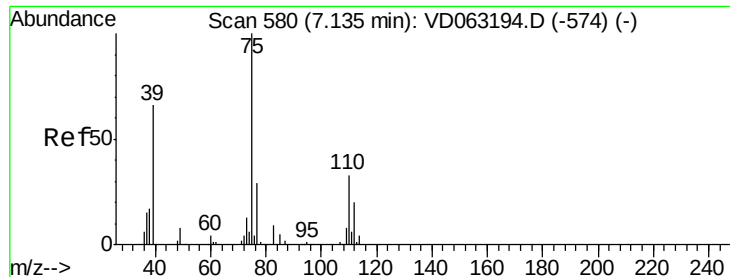
Tgt Ion:114 Resp: 182729  
 Ion Ratio Lower Upper  
 114 100  
 63 24.3 0.0 35.2  
 88 18.2 0.0 34.6



#35  
 Dibromofluoromethane  
 Concen: 52.416 ug/l  
 RT: 6.90 min Scan# 556  
 Delta R.T. -0.01 min  
 Lab File: VD063326.D  
 Acq: 2 Aug 2019 19:35

Tgt Ion:113 Resp: 81775  
 Ion Ratio Lower Upper  
 113 100  
 111 92.9 83.2 124.8  
 192 15.5 11.8 17.8

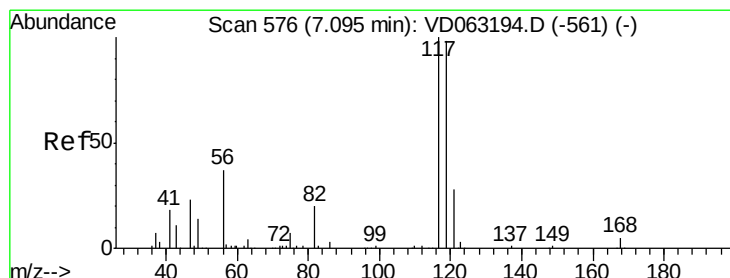
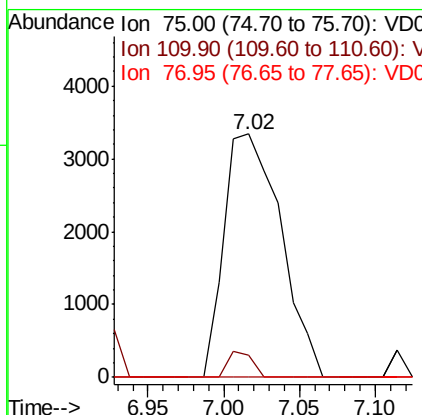
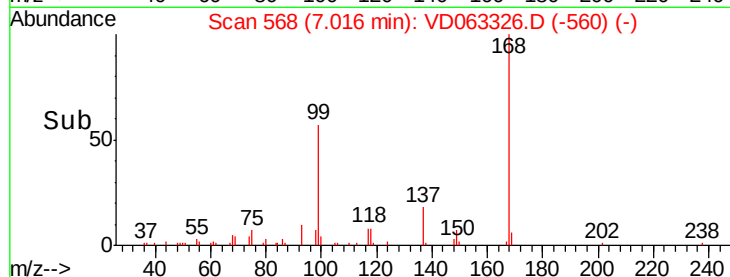
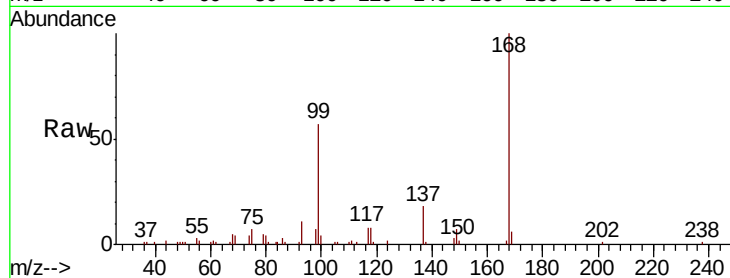




#36  
 1,1-Dichloropropene  
 Concen: 5.232 ug/l  
 RT: 7.02 min Scan# 568  
 Delta R.T. -0.12 min  
 Lab File: VD063326.D  
 Acq: 2 Aug 2019 19:35

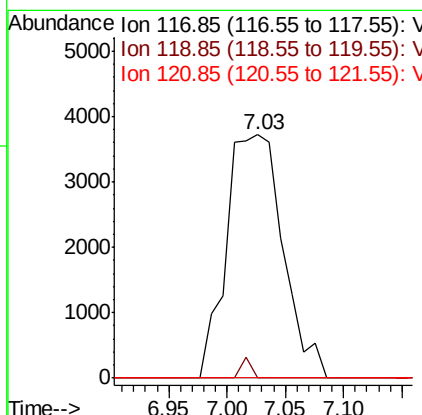
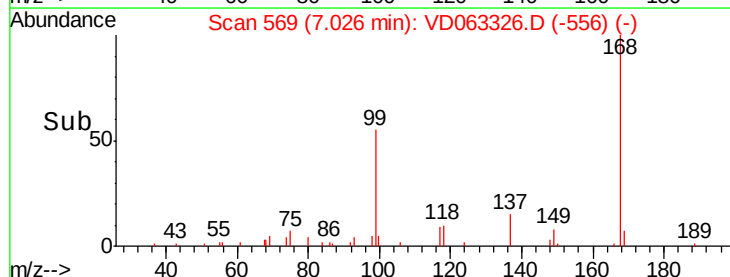
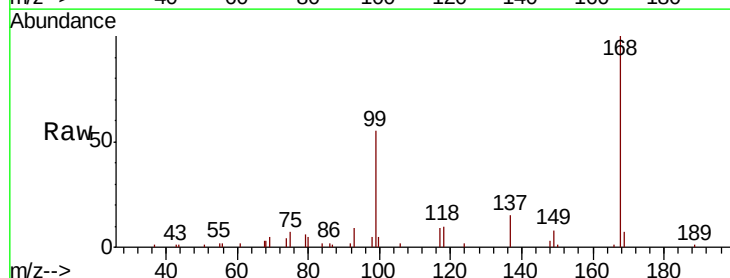
Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 1S-F2-(30)

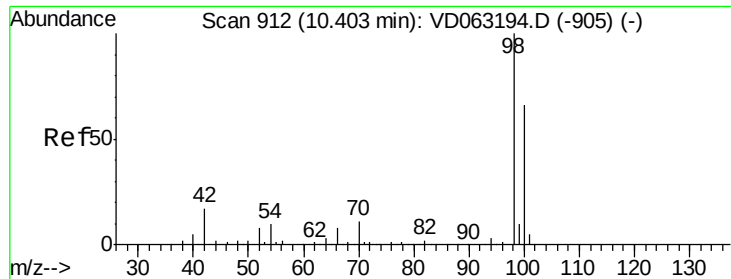
Tgt Ion: 75 Resp: 8725  
 Ion Ratio Lower Upper  
 75 100  
 110 9.1 16.1 48.2#  
 77 0.0 22.7 34.1#



#38  
 Carbon Tetrachloride  
 Concen: 4.980 ug/l  
 RT: 7.03 min Scan# 569  
 Delta R.T. -0.07 min  
 Lab File: VD063326.D  
 Acq: 2 Aug 2019 19:35

Tgt Ion: 117 Resp: 12503  
 Ion Ratio Lower Upper  
 117 100  
 119 0.0 78.2 117.2#  
 121 0.0 22.1 33.1#

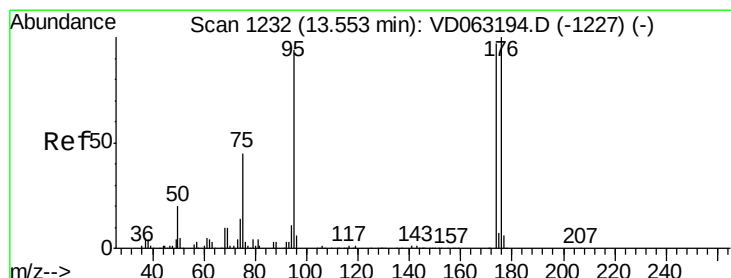
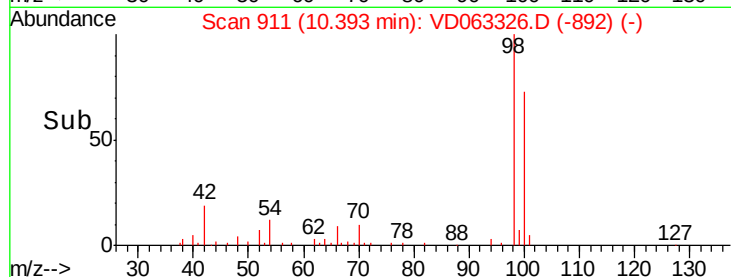
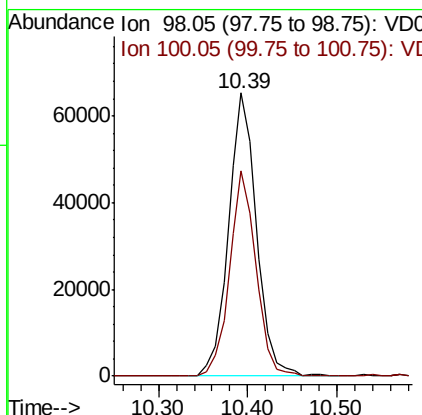
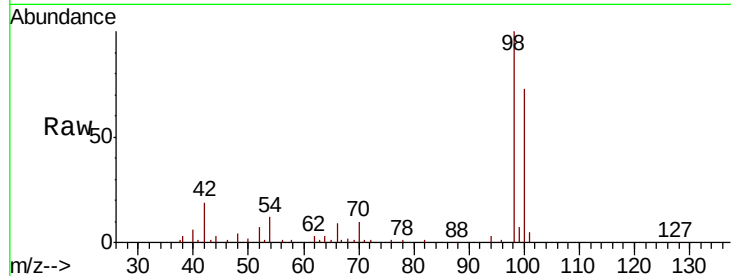




#50  
Toluene-d8  
Concen: 41.091 ug/l  
RT: 10.39 min Scan# 911  
Delta R.T. -0.01 min  
Lab File: VD063326.D  
Acq: 2 Aug 2019 19:35

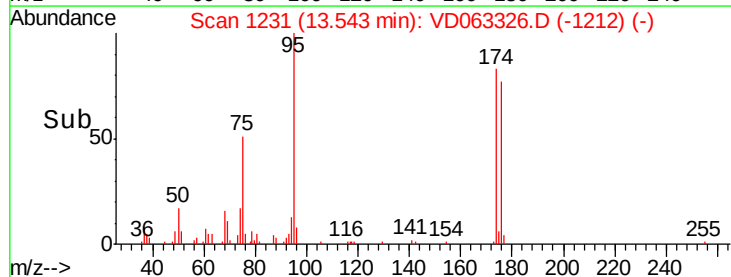
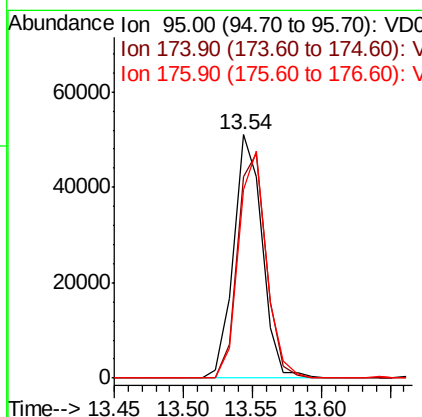
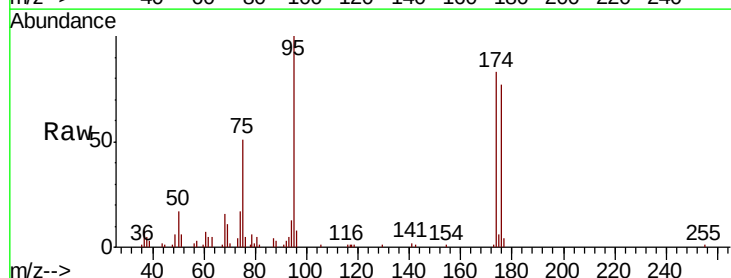
Instrument :  
MSVOA\_D  
ClientSampleId :  
1S-F2-(30)

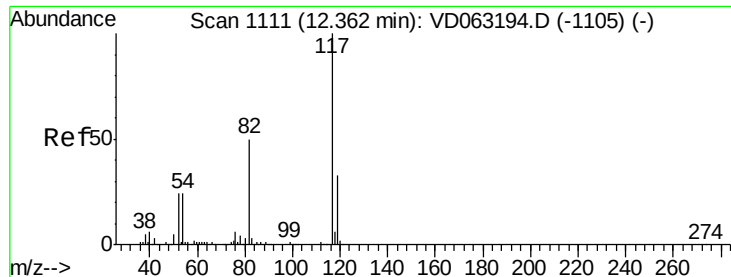
Tgt Ion: 98 Resp: 143472  
Ion Ratio Lower Upper  
98 100  
100 72.5 53.2 79.8



#62  
4-Bromofluorobenzene  
Concen: 46.325 ug/l  
RT: 13.54 min Scan# 1231  
Delta R.T. -0.01 min  
Lab File: VD063326.D  
Acq: 2 Aug 2019 19:35

Tgt Ion: 95 Resp: 73706  
Ion Ratio Lower Upper  
95 100  
174 82.8 0.0 205.4  
176 77.4 0.0 211.8

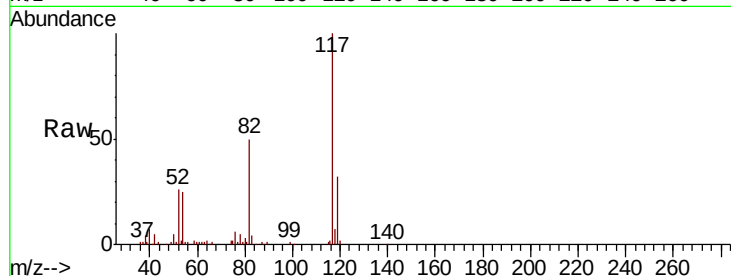




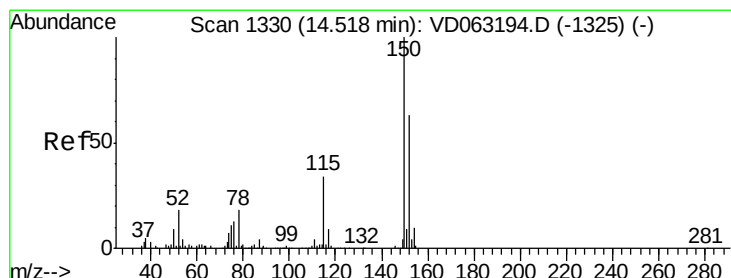
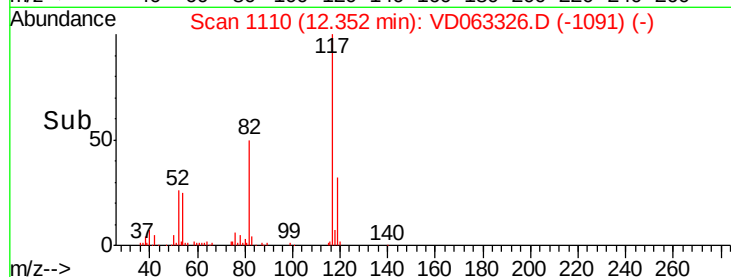
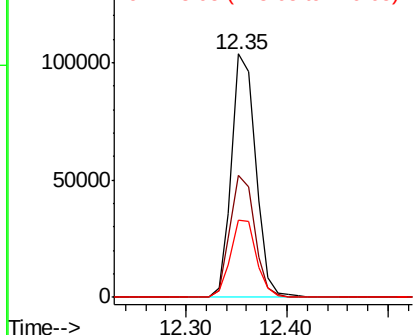
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 12.35 min Scan# 1110  
Delta R.T. -0.01 min  
Lab File: VD063326.D  
Acq: 2 Aug 2019 19:35

Instrument :  
MSVOA\_D  
ClientSampleId :  
1S-F2-(30)

Tgt Ion:117 Resp: 173561  
Ion Ratio Lower Upper  
117 100  
82 50.0 40.1 60.1  
119 31.9 26.5 39.7

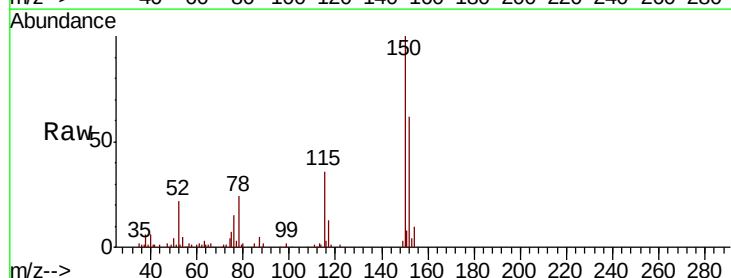


Abundance Ion 116.95 (116.65 to 117.65): V  
Ion 82.05 (81.75 to 82.75): V  
Ion 118.95 (118.65 to 119.65): V

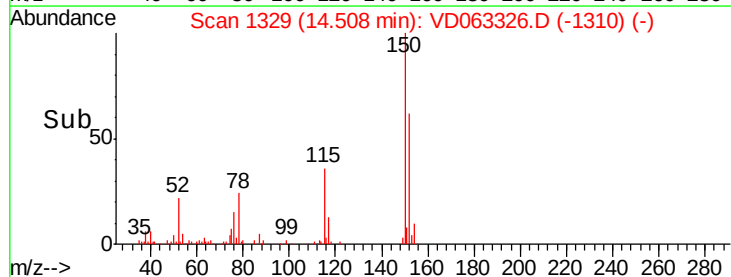
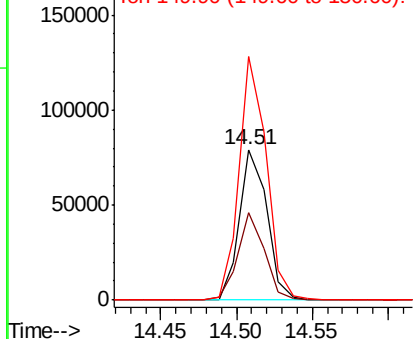


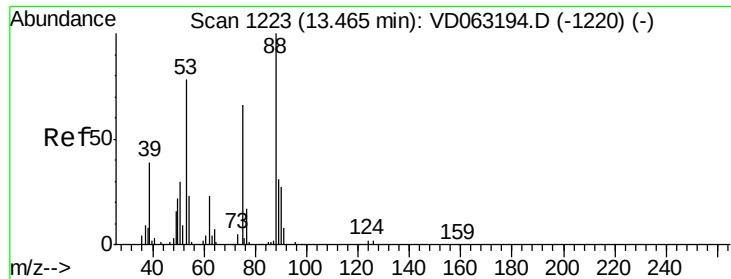
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 14.51 min Scan# 1329  
Delta R.T. -0.01 min  
Lab File: VD063326.D  
Acq: 2 Aug 2019 19:35

Tgt Ion:152 Resp: 100286  
Ion Ratio Lower Upper  
152 100  
115 58.5 27.5 82.4  
150 161.8 0.0 320.6



Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 115.00 (114.70 to 115.70): V  
Ion 149.90 (149.60 to 150.60): V





#81

trans-1,4-Dichloro-2-butene

Concen: 103.733 ug/l

RT: 13.54 min Scan# 1231

Delta R.T. 0.08 min

Lab File: VD063326.D

Acq: 2 Aug 2019 19:35

Instrument :

MSVOA\_D

ClientSampleId :

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Tgt Ion: 75 Resp: 34697

Ion Ratio Lower Upper

75 100

53 0.0 94.9 142.3#

89 0.0 37.4 56.0#

